

Meeting: 1003, Atlanta, Georgia, SS 4A, AMS-SIAM Special Session on Theoretical and Computational Aspects of Inverse Problems, I

1003-47-55 **Amin Boumenir*** (boumenir@westga.edu), Department of Mathematics, 1600, Maple street, Carrollton, GA 30118. *The impedance tomography problem.*

Using an operator theoretic framework and pseudo-spectral methods, we provide a simple and explicit formula for the conductivity coefficient in terms of the Dirichlet to Neumann map and the eigenvalues of the Laplacian operator. (Received July 21, 2004)